

REMARKS

Claims 12, 14-24 and 26 are pending in the subject application. By the instant amendment, claim 12 is amended to more particularly claim the subject matter of the present invention. No new matter is added by the amendment to claim 12, as the subject matter thereof may be found in application as originally filed at page 10, line 23-page 11, line 9, and in FIGS. 9 and 10.

Claims 12, 14-24 and 26 are submitted to the Examiner for further consideration on the merits. In view of the foregoing amendment and following remarks, reconsideration and withdrawal of the rejections in this application are respectfully requested.

A. Introduction

In the Office Action mailed September 16, 2002, the Examiner rejected claims 12, 14-16, 18-22, 24 and 26 under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 6,166,423 to Gambino et al. ("the Gambino et al. reference") in view of United States Patent No. 5,534,461 to Kuwajima ("the Kuwajima reference"). The Examiner rejected claim 17 under 35 U.S.C. § 103(a) as being unpatentable over the Gambino et al. reference and the Kuwajima reference as applied to claims 12 and 14, and further in view of United States Patent No. 6,074,907 to Oh et al. ("the Oh et al. reference"). The Examiner rejected claim 23 under 35 U.S.C. § 103(a) as being unpatentable over the Gambino et al. reference and the Kuwajima reference as applied to claim 12, and further in view of United States Patent No. 6,066,555 to Nulty et al. ("the Nulty et al. reference").

B. Asserted Rejections Under 35 U.S.C. § 103(a)

In the outstanding Office Action, the Examiner rejected claims 12, 14-16, 18-22, 24 and 26 under 35 U.S.C. § 103(a) as being unpatentable over the Gambino et al. reference in view of the Kuwajima reference.

The Kuwajima reference is directed toward a method of manufacturing a planarized wiring layer in a semiconductor device, and does not teach or suggest formation of a capacitor as claimed in claim 12 of the subject application. Accordingly, the Kuwajima reference does not teach or suggest forming a lower electrode of a capacitor, a dielectric layer of a capacitor, or an upper electrode of a capacitor, all of which are claimed in the method of manufacturing a semiconductor integrated circuit capacitor of claim 12 of the subject application.

In the outstanding Office Action at p. 3, the Examiner asserts that the p⁻-type well 2 of the Kuwajima reference is equivalent to the lower electrode of the present invention. However, applicants' respectfully submit that forming a doped region in a semiconductor substrate is not the equivalent of forming a lower electrode on a predetermined surface of an **insulating** substrate, as claimed in claim 12 of the subject application.

The Kuwajima reference does not teach or suggest forming a tungsten containing conductive layer on an exposed predetermined surface of a lower electrode, as claimed in claim 12 of the subject application; nor does the Kuwajima reference teach or suggest performing a tungsten etch back process to form a tungsten containing conductive sidewall spacer on the sidewalls of the first via hole and a portion of the exposed predetermined surface of the lower electrode, which is also claimed in claim 12 of the subject application. Further, the Kuwajima reference does not teach or suggest forming a dielectric layer on the tungsten containing conductive sidewall spacer and predetermined surface of the lower electrode not covered by the

tungsten containing conductive sidewall spacer, or forming an upper electrode connected to the dielectric layer, as also claimed in claim 12 of the subject application.

Therefore, applicants' respectfully submit that the use of the Kuwajima reference to reject claim 12 of the subject application is improper, and the rejection of claim 12 is respectfully traversed. Claim 12 is believed to patentably distinguished over the cited prior art references, and a notice to such effect is respectfully requested.

Further, because claims 14-16, 18-22, 24 and 26 depend from claim 12, either directly or indirectly, applicants' respectfully submit that the use of the Kuwajima reference to reject claims 14-16, 18-22, 24 and 26 of the subject application is improper, and the rejections of these claims are also respectfully traversed. Claims 14-16, 18-22, 24 and 26 are believed to be allowable as depending from an allowable base claim, and a notice to such effect is respectfully requested.

C. Rejection of Claim 17 under 35 U.S.C. § 103(a)

In the outstanding Office Action, the Examiner rejected claim 17 under 35 U.S.C. § 103(a) as being unpatentable over the Gambino et al. reference and the Kuwajima reference as applied to claims 12 and 14, and further in view of the Oh et al. reference.

However, the Kuwajima reference does not teach or suggest forming a capacitor as claimed in claim 12 of the subject application, from which claim 17 indirectly depends. Further, neither the Gambino et al. reference nor the Oh et al. reference teaches the present invention as claimed in claim 12. Therefore, because claim 17 depends indirectly from claim 12, which is believed to be in condition for allowance, claim 17 is believed to be allowable as depending from an allowable base claim. Accordingly, reconsideration and withdrawal of the rejection of claim 17 are respectfully requested.

E. Rejection of Claim 23 under 35 U.S.C. § 103(a)

In the outstanding Office Action, the Examiner rejected claim 23 under 35 U.S.C. § 103(a) as being unpatentable over the Gambino et al. reference and the Kuwajima reference as applied to claim 12, and further in view of the Nulty et al. reference.

As previously stated, the Kuwajima reference does not teach or suggest forming a capacitor as claimed in claim 12 of the subject application. Further, neither the Gambino et al. reference nor the Nulty et al. reference teaches the present invention as claimed in claim 12, and claim 12 is believed to be in condition for allowance.

Therefore, because claim 23 depends from claim 12, claim 23 is believed to be allowable as depending from an allowable base claim. Accordingly, reconsideration and withdrawal of the rejection of claim 23 are respectfully requested.

E. Conclusion

Since none of the cited prior art references, either alone or combined, anticipate or render obvious the claims of the subject application, it is submitted that claims 12, 14-24 and 26 are in condition for allowance, and a notice to such effect is respectfully requested.


Finally, if the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendment and remarks, an early and favorable action on all of the pending claims is hereby requested.

Respectfully submitted,

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If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying papers may also be charged to Deposit Account No. 50-1645.